Elektronische Bauelemente

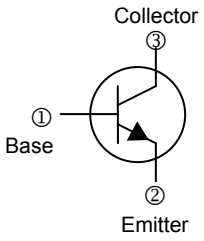
2SC3356

NPN Silicon
Plastic Encapsulated Transistor

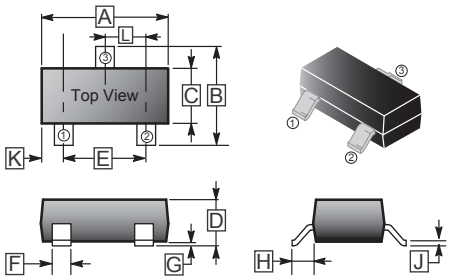
RoHS Compliant Product
A suffix of "-C" specifies halogen and lead free

FEATURES

- Low Noise Amplifier at VHF, UHF and CATV band
- Low Noise and High Gain
- High Power Gain



SOT-23



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.80	3.00	G	0.10 REF.	
B	2.25	2.55	H	0.55 REF.	
C	1.20	1.40	J	0.08	0.15
D	0.90	1.15	K	0.5 REF.	
E	1.80	2.00	L	0.95 TYP.	
F	0.30	0.50			

ABSOLUTE MAXIMUM RATINGS (T_A = 25°C unless otherwise noted)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector to Base Voltage	V_{CBO}	20	V
Collector to Emitter Voltage	V_{CEO}	12	V
Emitter to Base Voltage	V_{EBO}	3	V
Collector Current - Continuous	I_C	0.1	A
Collector Power Dissipation	Pc	0.25	W
Junction, Storage Temperature	T_J, T_{STG}	+150, -55 ~ +150	°C

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	20	-	-	V	I_C=10μA, I_E=0
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	12	-	-	V	I_C= 1mA, I_B=0
Collector Cut-Off Current	I_{CBO}	-	-	1	μA	V_{CB}=10V, I_E=0
Emitter Cut-Off Current	I_{EBO}	-	-	1	μA	V_{EB}= 1V, I_C=0
DC Current Gain	h_{FE*}	50	-	250		V_{CE}= 10V, I_C=20mA
Transition Frequency	f_T	-	7	-	GHz	V_{CE}=10V, I_C= 20mA,
Noise Figure	NF	-	-	2	dB	V_{CE}=10V, I_C= 7mA, f = 1GHz

*Pulse Test: Pulse Width ≦ 350μs, Duty Cycle≦2%

CLASSIFICATION OF h_{FE}

MARKING	R23	R24	R25
RANK	Q	R	S
RANGE	50-100	80-160	125-250

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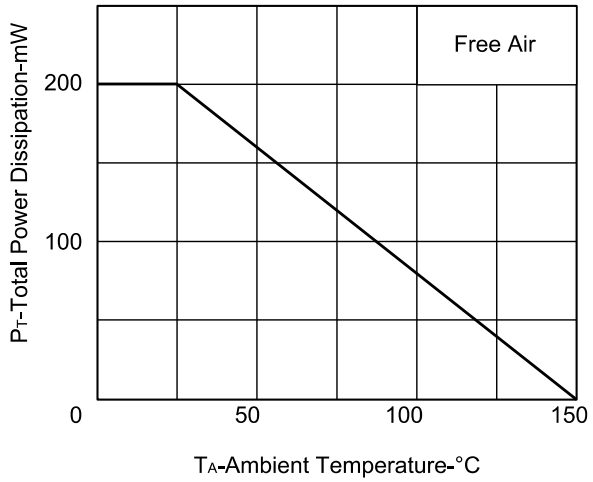
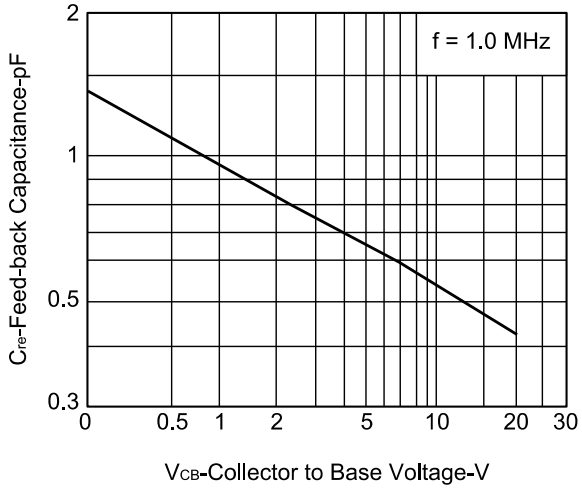
TYPICAL CHARACTERISTICS (T_A = 25°C)

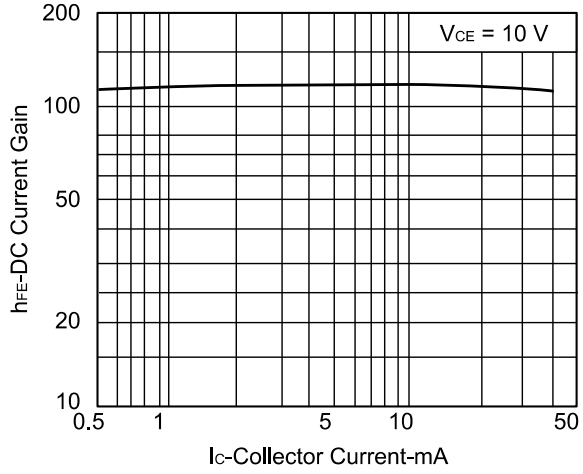
TOTAL POWER DISSIPATION vs. AMBIENT TEMPERATURE



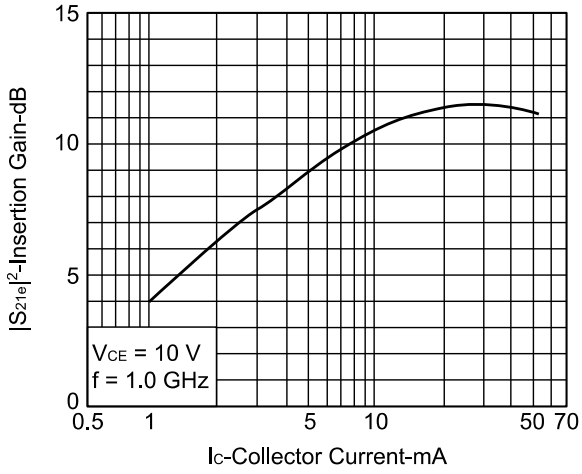
FEED-BACK CAPACITANCE vs. COLLECTOR TO BASE VOLTAGE



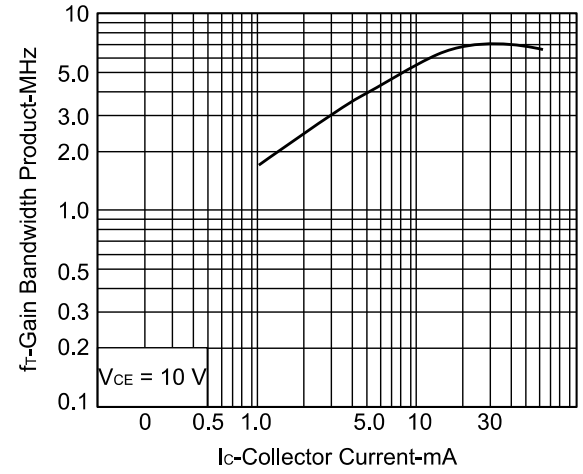
DC CURRENT GAIN vs. COLLECTOR CURRENT



INSERTION GAIN vs. COLLECTOR CURRENT



GAIN BANDWIDTH PRODUCT vs. COLLECTOR CURRENT



INSERTION GAIN, MAXIMUM GAIN vs. FREQUENCY